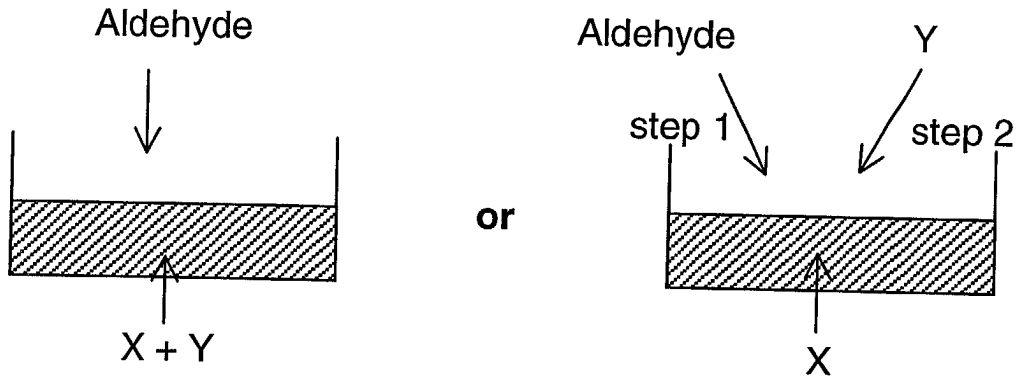
Figure 1

Reaction 1

Aldehyde + X → Compound with first color (Preferably, this is colorless)

Reaction 2 (Preferably, reaction 2 is slower than reaction 1)

Aldehyde + Y → Compound with second color



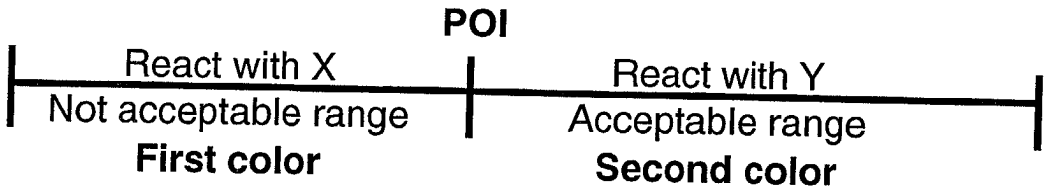


Figure 2

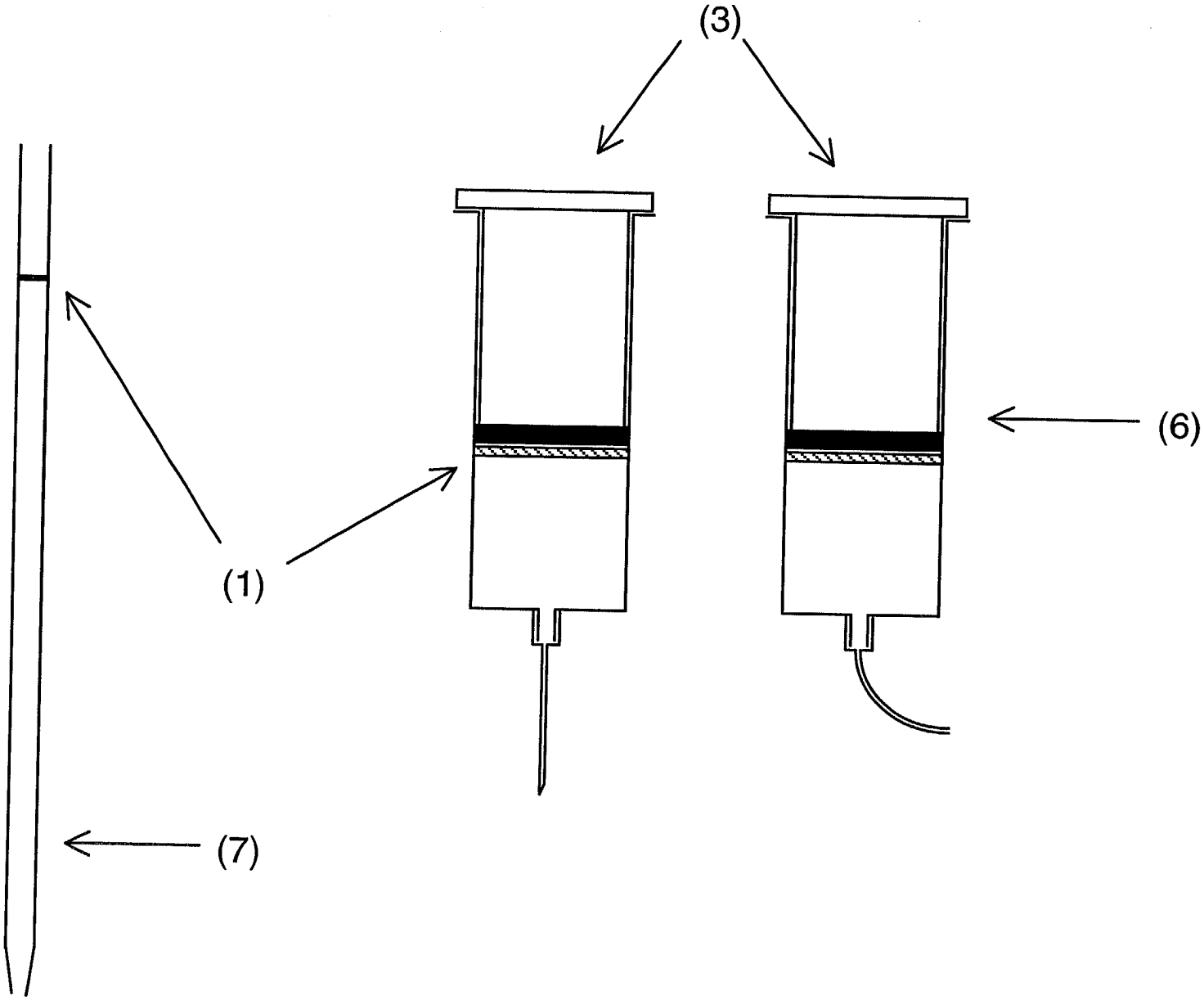


Figure 3

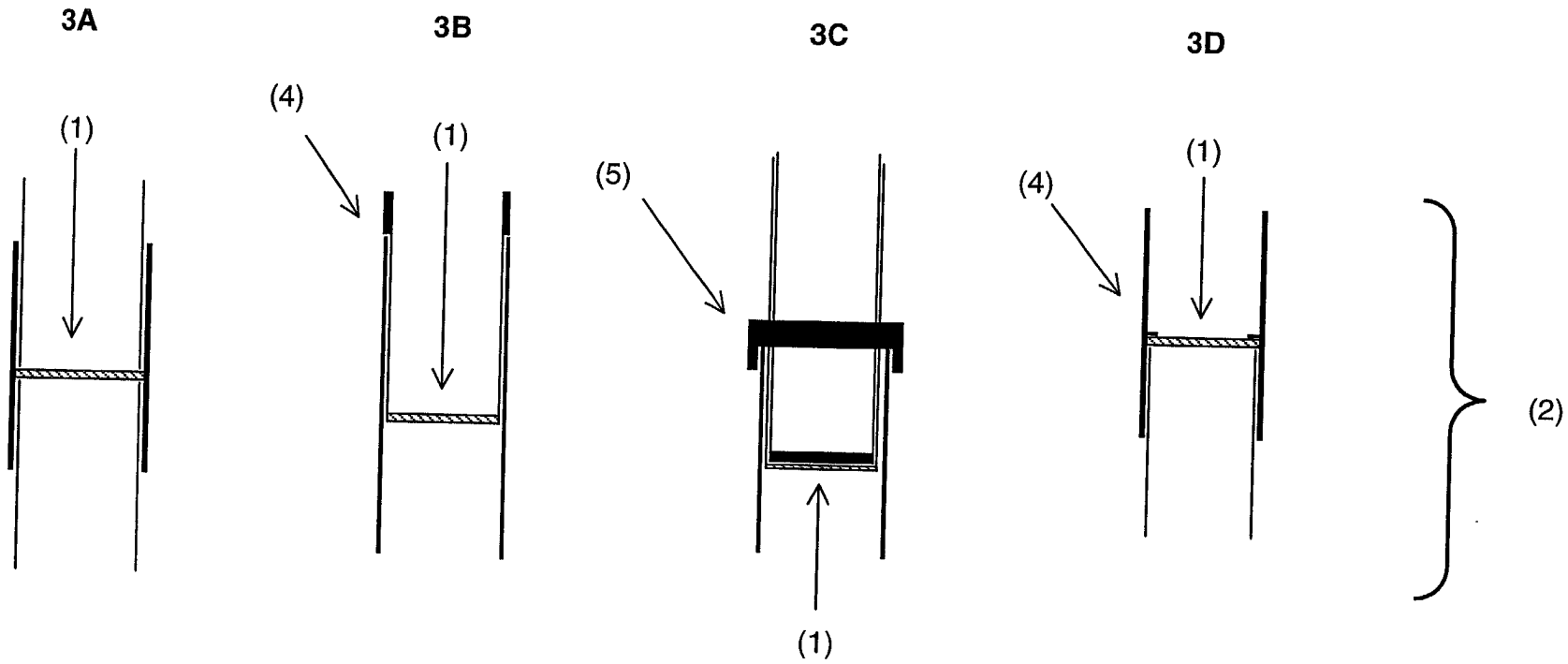


Figure 4

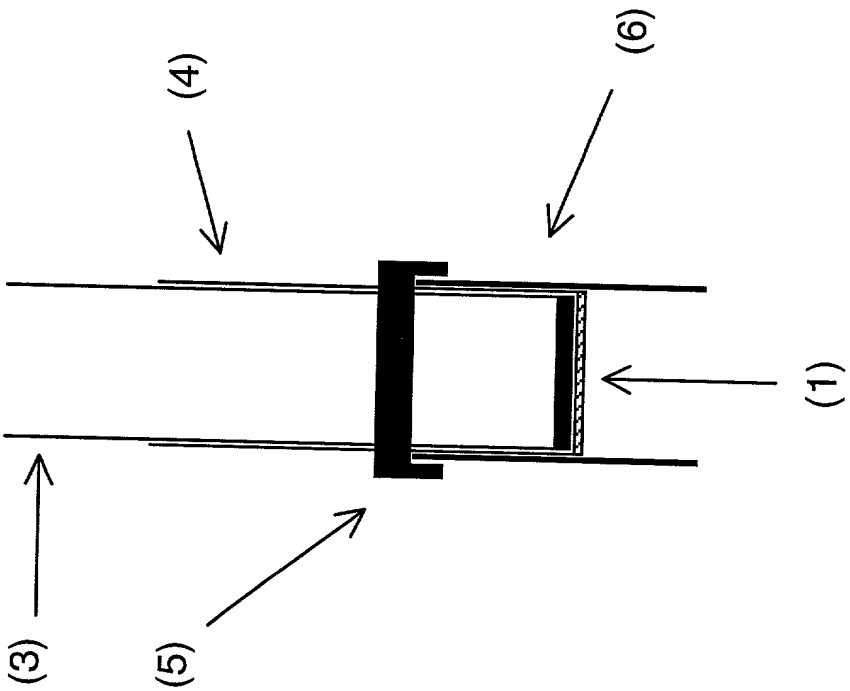


Figure 5

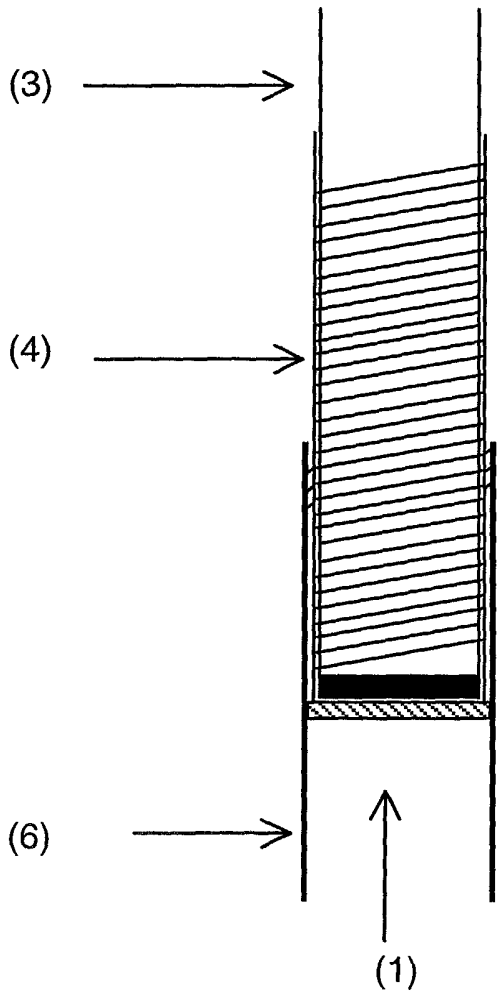
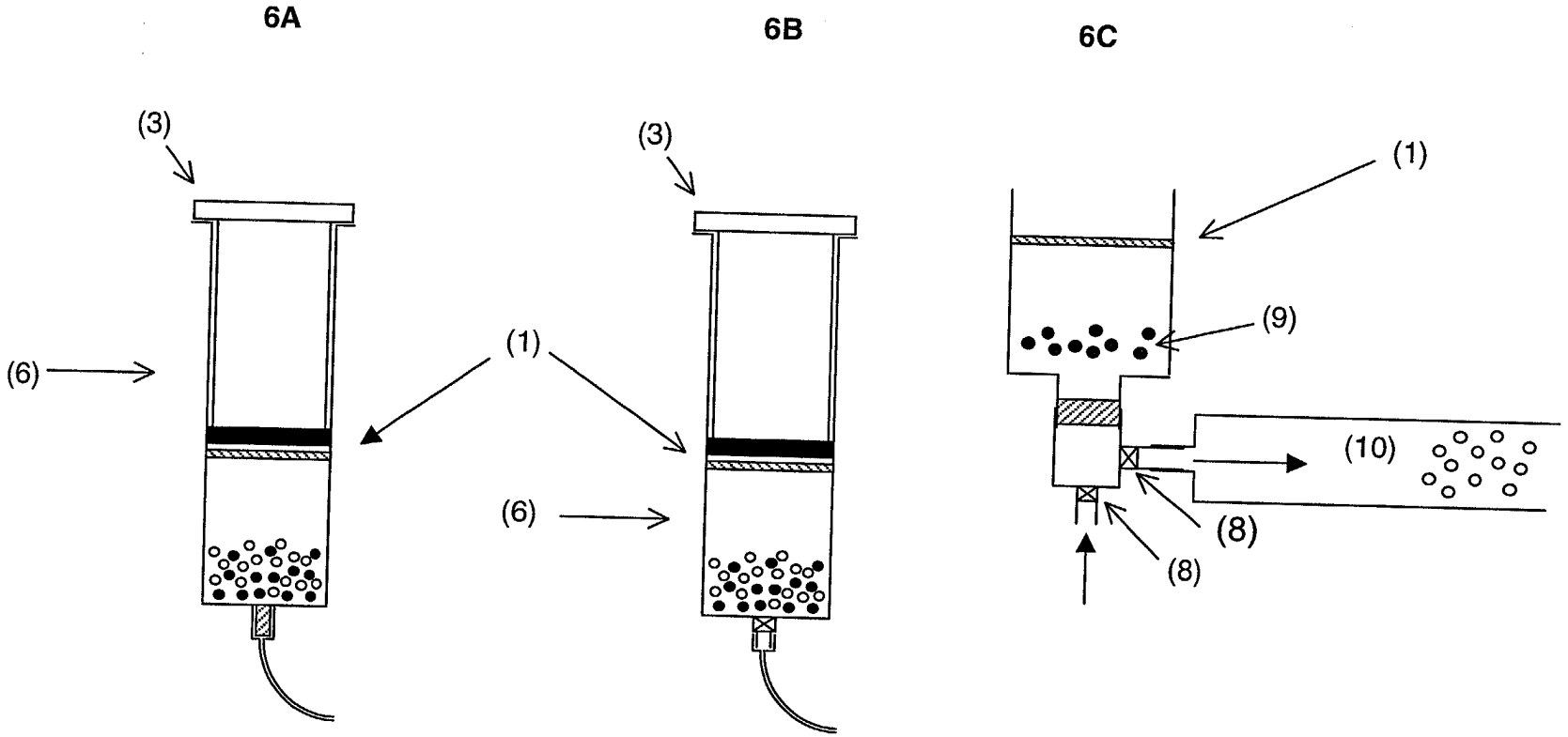



Figure 6